Abstract of the Disclosure

A pragmatic trellis code modulation decoder is disclosed. The pragmatic trellis code modulation decoder includes a demodulator for receiving a modulated signal and computing coordination values of symbols of the modulated signal on an I-axis and Q-axis in a constellation; a coset mapper for generating 3-bit soft decision data based on the computed coordinate values; a viterbi decoder for receiving 3-bit soft decision data and generating 1-bit data as a coded data by decoding the 3-bit soft decision data; a re-encoder for receiving the 1-bit data from the viterbi decoder and obtaining un-coded information in order to compute an un-coded data; a sector phase quantizer for obtaining I channel and Q channel information based on the coordination values from the demodulator in order to obtain un-coded data; a time delayer for delaying output of the sector phase quantizer until the re-encoder outputs the un-coded information; and a non-coded code decoder for computing the un-coded data by decoding the output of the sector phase quantizer based on the un-coded information from the re-encoder and the I channel and Q channel information from the sector phase quantizer.